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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,276	01/27/2004	Mahesh Siddappa	2906P	3466

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EXAMINER

PHAN, RAYMOND NGAN

ART UNIT PAPER NUMBER

2111

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,276

Applicant(s)

SIDDAPPA, MAHESH

Examiner

Raymond Phan

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 2-4,9-11,16-18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01182005</u> . | 6) <input type="checkbox"/> Other: _____ |

Part III DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-20 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1, 5-8, 12-15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Chiang et al. (US No. 6,874,055).

In regard to claim 1, Chiang et al. disclose a method for high speed USB data routing (see figure 2), the method comprising: routing a data stream to and

from USB I/O ports serially (see figure 2, col. 4, lines 1-26); and maintaining a frequency of the data stream during the routing (see col. 4, lines 27-51).

In regard to claims 5, 12, Chiang et al. disclose the step of performing the routing in a USB hub (see col. 6, lines 15-25).

In regard to claims 6, 13, Chiang et al. disclose the step of performing the routing with up to seven I/O ports (see col. 3, lines 66-67).

In regard to claims 7, 14, Chiang et al. disclose wherein maintaining the frequency of the data stream during the routing further comprises maintaining the frequency at 480 MHz (i.e. high speed) (see col. 1, lines 51-53).

In regard to claim 8, Chiang et al. disclose a system for high speed USB data routing, the system comprising: a plurality of USB I/O ports 221, 241 (see figure 2, col. 4, lines 1-26) ; and a plurality of routers 225, 245 coupled to the plurality of USB I/O ports for routing a data stream to and from the USB I/O ports serially (see col. 4, lines 1-26) and maintaining a frequency of the data stream during the routing (see col. 4, lines 27-51).

In regard to claim 15, Chiang et al. disclose a method for high speed USB data routing, the method comprising: providing a root port router 29 for a root port (i.e. host port) of a USB hub (see figure 2, col. 4, lines 1-26); providing a data port router 225 for each I/O port 221 of the USB hub (see figure 2, col. 4, lines 1-26); and routing data of a data stream serially between the root port router 29 and each data port router 225 without altering a frequency of the data stream (see figure 2, col. 4, lines 27-51).

Allowable Subject Matter

6. Claims 2-4, 9-11, 16-18, 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form

including all of the limitations of the base claim and any intervening claims.

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter: Claims 2-4, 9-11, 16-18, 20 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior arts which teach wherein each data port router delays the data stream by one bit during the routing (claims 2, 9); routing on a two-bit wire, the two-bit wire carrying a data bit and a corresponding enable bit for each bit of the data stream (claims 3, 10, 18); wherein routing further comprises routing from a root port downstream (i.e. USB host) to at least one I/O port and from one I/O port upstream (i.e. host port) to the root port (claims 4, 11, 16-17); a data control block for the data port router and each I/O port to control enabling of each I/O port during the routing (claim 20).

Conclusion

6. Claims 1, 5-8, 12-15 are rejected. Claims 2-4, 9-11, 16-18, 20

7. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Bouchier et al. (US No. 6,839,771) disclose a method and system for using a USB as a peer-to-peer network.

Chou et al. (US No. 6,874,044) disclose a flash drive/reader with serial port controller and flash memory controller mastering a second RAM buffer bus parallel to a CPU bus.

Aguilar et al. (US No. 6,199,137) disclose a method and device for controlling data flow through an I/O controller.

Fredin et al. (US No. 6,529,963) disclose a methods and apparatus for interconnecting independent fibre channel fabrics.

Broyles (US No. 6,732,219) discloses a dynamic allocation of device to host controllers.

Dickens et al. (US No. 6,549,966) disclose a data routing device and system.

Chen et al. (US Pub No. 2004/0148450) disclose a serially connectable USB drive.

Lan (US Pub No. 2004/0030820) discloses a combinational USB transmission structure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (571) 272-3630. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (571) 272-3639 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 central telephone number is (571) 272-2100.



Raymond Phan
January 31, 2006



Khanh Dang
Primary Examiner